AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q96124

Application No.: 10/587,029

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A quantum dot-dispersed light emitting device comprising:

a substrate;

an electron injection electrode;

a hole injection electrode; and

an inorganic light emitting layer disposed so as to be in direct contact with both the electrodes,

wherein the inorganic light emitting layer

includes an ambipolar inorganic semiconductor material and nanocrystals constituting a quantum dot

dispersed as luminescent centers in the ambipolar inorganic semiconductor material in which coating

materials for coating surfaces of the nanocrystals are eliminated from the surfaces of the nanocrystals, and

is configured without having, at the interface with the electron injection electrode and/or the hole

injection electrode, epitaxial relation therewith.

2. (original) The quantum dot-dispersed light emitting device according to claim 1,

wherein the ambipolar inorganic semiconductor material is an amorphous semiconductor phase.

3. (original) The quantum dot-dispersed light emitting device according to claim 1,

wherein the ambipolar inorganic semiconductor material is a polycrystal semiconductor phase.

4. (previously presented): The quantum dot-dispersed light emitting device according to claim 1-

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wherein the inorganic light emitting layer comprises a ZnS type semiconductor phase.

5. (original) The quantum dot-dispersed light emitting device according to claim 4,

wherein the inorganic light emitting layer comprises $Zn_pM_{1-p}S_xSe_vTe_{1-x-v}$ (where $0 \le x, y, x + y \le 1$,

 $0 \le p \le 1$, M: alkaline-earth metal, Cd).

6. (previously presented): The quantum dot-dispersed light emitting device according to claim 4,

wherein the nanocrystals constituting a quantum dot contain any of InP, GaAs, and GaP as a main

component.

7. (previously presented): The quantum dot-dispersed light emitting device according to claim 1,

wherein the hole injection electrode comprises Cu-doped $Zn_pM_{1-p}S_xSe_yTe_{1-x-y}$ (where $0 \le x, y, x + y \le x$

1, 0 , M: alkaline-earth metal, Cd).

8. (previously presented): The quantum dot-dispersed light emitting device according to claim 1,

wherein the substrate is a glass substrate.

9. (previously presented): The quantum dot-dispersed light emitting device according to claim 1,

wherein the electron injection electrode and the hole injection electrode are disposed spaced apart

from each other, with the inorganic light emitting layer interposed therebetween, in a lamination on the

substrate.

10. (previously presented): The quantum dot-dispersed light emitting device according to claim 1,

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wherein the electron injection electrode and the hole injection electrode are disposed spaced apart

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from each other in a plane on the substrate.

11. (previously presented): The quantum dot-dispersed light emitting device according to claim 1,

wherein a gate electrode is disposed between the electron injection electrode and the hole injection

electrode.

12. (previously presented): A display apparatus comprising the quantum dot-dispersed light emitting

device according to claim 1.

13. (previously presented): An illumination device comprising the quantum dot-dispersed light

emitting device according to claim 1.

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